

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of)  
MAUI ELECTRIC COMPANY, LIMITED )  
For Approval to Establish EV-MAUI )  
Electric Vehicle Fast Charging )  
Service and Related Accounting )  
Treatment. )  
\_\_\_\_\_ )

DOCKET NO. 2018-0422

DECISION AND ORDER NO. 36229

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DECISION AND ORDER

On December 21, 2018, MAUI ELECTRIC COMPANY, LIMITED ("MECO" or "Maui Electric") filed an application requesting approval (1) of MECO's proposed Schedule EV-MAUI electric vehicle ("EV") fast-charging service tariff ("Schedule EV-MAUI"), and (2) to defer certain operations and maintenance ("O&M") expenses relating to offering such services until rates that reflect these amounts take effect in MECO's next general rate case ("deferral request").<sup>1</sup> Underlying MECO's specific requests for

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<sup>1</sup>"Application of Maui Electric Company, Limited; Exhibits A-D; Verification; and Certificate of Service" ("Application"), filed on December 21, 2018, at 3. Below, the commission first addresses MECO's deferral request, and then addresses MECO's request for approval of Schedule EV-MAUI.

The Parties are MECO and the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"), an ex officio party, pursuant to



approval is MECO's proposal to own and operate eight EV charging stations that are currently part of the EV direct current fast charger ("DCFC") EVohana network (referred to generally below as MECO's "proposal").<sup>2</sup>

By this Decision and Order, the commission: (1) denies MECO's proposed Schedule EV-MAUI, without prejudice, and instructs MECO to file a revised tariff consistent with the commission's guidance; and (2) grants MECO's request to defer certain O&M expenses, subject to MECO's implementation of a shared savings mechanism, as detailed below.<sup>3</sup>

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Hawaii Revised Statutes ("HRS") § 269-51 and Hawaii Administrative Rules ("HAR") § 16-601-62(a). No persons moved to intervene or participate in the subject proceeding.

<sup>2</sup>The existing EVohana network consists of thirteen charging stations. See Application at 6.

<sup>3</sup>The commission notes that MECO filed its Application on December 21, 2018, and requested a commission decision by February 28, 2019. In Order No. 36189, "Instructing Maui Electric Company, Ltd. to Refile its Response to PUC-MECO-IR-117.b," filed on February 28, 2019, the commission explained that it had intended to, and had made every effort to, issue a decision and order in this docket within that expedited timeframe, however, due to the new material contained in MECO's responses to PUC-MECO-IR-116 through -119 that was not filed until February 20, 2019, the commission was obligated to take additional time to review the new material filed, and to resolve the issues regarding the redactions to MECO's response to PUC-MECO-IR-117.b, in order to make its determination regarding the requests in MECO's Application.

I.

BACKGROUND

A.

MECO's Proposed Ownership of Select EVohana Network Locations

The EVohana network currently consists of twenty-six DCFCs and three Level 2 chargers at thirteen charging stations on the island of Maui.<sup>4</sup> The Maui Economic Development Board ("MEDB") owns the EVohana network, which is currently operated and maintained by Hitachi Advanced Clean Energy Corporation ("HIACE").<sup>5</sup> The EVohana network was initially operated as the "Japan-U.S. Maui Project or JUMPSmartMaui ('JUMPSmart'), funded by the New Energy and Industrial Technology Development Organization ('NEDO'), with numerous partnerships including MEDB, HIACE, the County [of Maui] and Maui Electric from 2011-2017."<sup>6</sup> In 2017, NEDO transferred the network to MEDB; MEDB then contracted with HIACE to operate and maintain the network, rebranding it

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<sup>4</sup>See Application at 1; MECO's Response to PUC-MECO-IR-109 at 2, filed on February 4, 2019.

<sup>5</sup>Application at 5.

<sup>6</sup>Application at 5.

as "EVohana."<sup>7</sup> The existing contract with HIACE expires on March 31, 2019.<sup>8</sup>

MECO proposes to assume ownership of eight of the thirteen charging stations of the EVohana network,<sup>9</sup> which MEDB has agreed to transfer to MECO at no cost.<sup>10</sup> However, before MECO assumes ownership of the stations, MECO explains that "MEDB will continue to own and operate the eight selected locations" "with financial support from stakeholder agencies"<sup>11</sup> for an

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<sup>7</sup>See Application at 5.

<sup>8</sup>Application at 5.

<sup>9</sup>Application at 6, 7. MECO states that the eight stations were "selected based on high utilization and strategic location[.]" Id. at 6 (footnote omitted).

<sup>10</sup>Application at 2; Exhibit B (October 15, 2018 Letter from MEDB to MECO offering to transfer ownership of its DCFC assets at no cost to MECO).

<sup>11</sup>Application at 9. The Application includes a letter of support from Ulupono Initiative ("Ulupono"), in which Ulupono states: "to support the transfer of the assets, Ulupono, Maui County, and [MEDB] are committed to ensuring the charging stations remain operational until MECO receives PUC approval and is able to acquire the network. Maintaining the Maui DCFC network during the transition period comes at a significant financial cost of up to \$300,000. Due to the importance of the network and belief that MECO is the proper partner for the future, Ulupono, along with Maui County, is willing to fund the transition period, cementing our belief in the value and positive potential of the network." Application, Exhibit C at 12. At the formal technical conference in this docket, held on January 23, 2019, a representative from Ulupono stated: "Our understanding is that Maui County has committed \$100,000 to the efforts, with Ulupono committing up to \$200,000 for these efforts." Formal Technical



"interim period."<sup>12</sup> Beginning in July 2020, and continuing over approximately 6 months,<sup>13</sup> MECO would assume ownership of each individual station when MECO is ready to replace the chargers at that station,<sup>14</sup> a "process [that] will repeat for each of the eight locations."<sup>15</sup> At each station, MECO intends to replace the existing chargers with two "dual port" DCFCs, for a total of sixteen chargers, which will be able to support domestic and international EVs,<sup>16</sup> as well as time of use billing.<sup>17</sup>

In support of its proposal, MECO highlights the significance of the existing network, stating that the EVohana

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Conference Transcript, filed on February 1, 2019 ("Transcript"), at 61.

<sup>12</sup>MECO explains that during the interim period, MECO "will have no obligations, financial or otherwise, with regards to the operation of the EVohana chargers[.]" Application at 9.

<sup>13</sup>See Application at Exhibit D.

<sup>14</sup>See Application at 9.

<sup>15</sup>Application at 10.

<sup>16</sup>See Application at 7. The existing chargers only support the CHAdeMO charging standard. Application at 7 n.8. MECO represents that it "will competitively bid for services, including network and software services, and maintenance and repair services[,]" before replacing any of the chargers. Application at 10.

<sup>17</sup>See Application at 8 (stating, "EVohana chargers only support vehicles that charge on the 'CHAdeMO' fast charging standards"), 9 (stating that the existing chargers do not support time-of-use billing).

network "serves as the backbone for EVs on Maui and currently supports approximately 300 of the 1,000 EV owners on the island."<sup>18</sup> More generally, MECO asserts that the availability of public charging options provides key support for the continued adoption of EVs on Maui, and that EV adoption will in turn provide benefits to all ratepayers. MECO specifically asserts that:

1. "Having a publicly available DCFC network helps to reduce range anxiety, provides charging options for EV drivers who do not have the ability to install personal charging infrastructure and encourages further EV adoption."<sup>19</sup>

2. Public chargers "serve an important role by providing charging options to EV drivers living in multi-unit dwellings or for businesses in multi-unit buildings. Filling gaps in the market like this helps to create opportunities for

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<sup>18</sup>Application at 1; see also id. at 5 (asserting that "[t]he program charging infrastructure remains an essential resource for the island's charging needs as EVs grow in popularity and presence" and that "[t]he JUMPSmart program was responsible for an adoption rate of approximately 150 light duty EVs per year since 2012, making Maui one of the leaders in the nation for EV adoption on a per-capita basis"), 7 (asserting that "the existing EVohana chargers already provide a portion of this backbone [of critical EV infrastructure] and have helped facilitate adoption of EVs on Maui during the JUMPSmart demonstration project").

<sup>19</sup>Application at 1-2.



third-party chargers that optimize grid and customer locations to meet driver needs."<sup>20</sup>

3. MECO's "acquisition of these charging facilities will expand support for electrified transportation, send a strong signal to the community that there is value in providing EV charging resources, and set the stage for developing market value over the long term."<sup>21</sup>

4. "[T]he Companies' studies have shown that there will be significant benefit to customers and the community as a whole as a result of future EV adoption. Through 2045, the Company expects that there will be an approximate \$6,000 net benefit, for every personal light duty EV added to the roadways."<sup>22</sup>

5. "Adoption of EVs advances the State's clean energy goals by adding electric powered vehicles onto the roadways in lieu of fossil fueled vehicles."<sup>23</sup>

In further support of its Application, MECO emphasizes that it "has received considerable community support for its

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<sup>20</sup>Application at 8.

<sup>21</sup>Application at 8.

<sup>22</sup>Application at 9.

<sup>23</sup>Application at 11.

efforts to continue the charging service.”<sup>24</sup> MECO’s Application includes letters of support from the Mayor of the County of Maui, Blue Planet Foundation, MEDB, and Ulupono.<sup>25</sup> In addition to providing letters of support, the record reflects that both the County of Maui and Ulupono have pledged financial assistance to maintaining the EVohana network during the interim period.<sup>26</sup>

B.

Estimated Financial Impacts of MECO’s Proposal

MECO estimates that its proposal will require approximately \$1.2 million in capital expenditures and ongoing annualized O&M expenses of \$180,000.<sup>27</sup> For O&M expenses incurred before an interim and final decision and order for MECO’s next rate case, MECO requests deferral of actual expenses, estimated to be \$140,000.<sup>28</sup> According to MECO’s bill impact, an average bill

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<sup>24</sup>Application at 5 (citing Exhibit C). Exhibit C includes letters in support from Blue Planet Foundation; Alan M. Arakawa, Mayor of the County of Maui; MEDB; and Ulupono.

<sup>25</sup>See generally Application, Exhibit C.

<sup>26</sup>Application, Exhibit C at 12; Transcript at 61.

<sup>27</sup>MECO’s Response to CA-IR-4.a at 2, filed on January 28, 2019 (correcting MECO’s Application, in which O&M was listed as \$190,000); see Application at 11.

<sup>28</sup>Application at 11, Exhibit D; MECO’s Response to PUC-MECO-IR-119, filed on February 20, 2019.

would be increased by 19 cents per month, or 14 cents with estimated offsetting revenues.<sup>29</sup>

Capital Expenditures. MECO estimates that the cost of replacing the existing chargers with sixteen "dual port" chargers at the eight selected stations is approximately \$1,244,400.<sup>30</sup> MECO states that it "established capital cost projections for charger upgrades at the 8 sites for 16 total chargers based on

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<sup>29</sup>MECO's Response to CA-IR-1.a at 1, Attachment 1, filed on January 28, 2019.

The commission notes that Exhibit C of MECO's Application includes financial analysis by Ulupono, included as an attachment to Ulupono's letter of support. See Application, Exhibit C at 13, 14. Ulupono states: "Based on MECO's estimates of the capital expenditures and operating expenses (net of the charging station usage revenue), MECO would recover its costs and rate of return on the Maui DCFC network from the increase in electricity sales from the addition of 400 EVs over 10 years, an average of 40 EVs per year." Id. at 13.

<sup>30</sup>MECO's Response to CA-IR-1, Attachment 3 (listing total capital expenditures of \$1,244,400, as well as estimated capital expenditures per charging station); but see MECO's Response to CA-IR-1 at 1, filed on January 28, 2019 (listing capital expenditures of \$1,244,000); MECO's Response to CA-IR-6 at 1, filed on January 28, 2019 (listing capital expenditures of \$1,244,000). In Attachment 3, MECO estimates that installing two DCFCs at each of the eight selected stations would range from \$126,300 to \$161,300. The estimates include transformer upgrades, wiring, removal of the existing DCFCs, installation of new DCFCs, as well as additional expenses. MECO's Response to CA-IR-1 at 1, Attachment 3; see MECO's Response to CA-IR-6 at 1-2. MECO additionally states that the estimated capital cost to replace the existing chargers as proposed in its Application is \$77,775 per DCFC. MECO's Response to PUC-MECO-IR-101 at 3. The commission presumes estimated capital expenditures to be \$1,244,400 (\$77,775 x 16 chargers).



engineering estimates and previous charger installations.”<sup>31</sup> MECO asserts that the “capital expenditures associated with this project will not require a separate application and approval in accordance with General Order No. 7.”<sup>32</sup>

Ongoing O&M. MECO estimates annual O&M of \$180,000 on an ongoing basis, beginning in the second half of 2021, when installation of the chargers is complete.<sup>33</sup> MECO explains that its estimates for O&M expenses are based on responses to a request for information for maintenance for charging locations under EV-U, and on current expenditures for MECO’s DCFC at its Kahului office.<sup>34</sup> MECO further explains that it intends to acquire the necessary services “via a competitive solicitation[.]”<sup>35</sup>

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<sup>31</sup>MECO’s Response to CA-IR-1.b.2 at 2, filed on January 28, 2019.

<sup>32</sup>MECO’s Response to PUC-MECO-IR-104.a, filed on February 4, 2019; see Application at 7 n.7 (stating, “[p]lant additions as a result of the capital expenditures incurred to replace existing chargers and upgrade existing infrastructure will be recovered through existing base rates and the Decoupling Rate Adjustment Mechanism (‘RAM’) Revenue Adjustment.”).

<sup>33</sup>MECO’s Response to CA-IR-1, Attachment 1 (showing the estimated annual O&M, escalation rate, revenue tax factor, and revenue requirement from 2021 through 2035); Application at 11-12.

<sup>34</sup>Application at 12; see also MECO’s Response to PUC-MECO-IR-102.c & d at 2-3, filed on February 4, 2019.

<sup>35</sup>MECO’s Response to PUC-MECO-IR-102.e at 3-4, filed on February 4, 2019.

Deferral of O&M. MECO requests that the commission approve MECO's request to defer expenses incurred between the commissioning of the first charging station (anticipated to be in July 2020) and the effective date of an interim or final decision and order in MECO's next general rate case (assumed to be its 2021 test year rate case), and to record the deferred costs in a regulatory asset account.<sup>36</sup> Although MECO estimates that such expenses will be \$50,000 in 2020, and \$90,000 for the first half of 2021, for a total of \$140,000,<sup>37</sup> MECO clarifies that it "is requesting deferral authority of actual expenses["<sup>38</sup> MECO estimates that, based on certain assumptions, the costs incurred during the deferral period will be \$140,000, but cautions that "the actual costs incurred over the deferral period could be influenced by a change to any one of the listed assumptions."<sup>39</sup>

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<sup>36</sup>See Application at 11; Exhibit D; MECO's Response to PUC-MECO-IR-103.a. at 1 (providing further details on the proposed deferred accounting treatment).

<sup>37</sup>Application at 11.

<sup>38</sup>MECO's Response to PUC-MECO-IR-119, filed on February 20, 2019 (emphasis added); see also Application at 11; MECO's Response to PUC-MECO-IR-103.a. at 1.

<sup>39</sup>MECO's Response to PUC-MECO-IR-119; see also MECO's Response to PUC-MECO-IR-102, Attachment 1. The assumptions are: (1) "the replacement of the first charging location beginning in July 2020," (2) "an interim or final decision and order in Maui Electric's next general rate case occurs in July 2021," and (3) incurred costs gradually ramp up to the annual, on-going expense estimate of \$180,000 as charging stations are



Regarding its deferral request, MECO additionally states: "to minimize the risk to the Company and its customers in fulfilling this community request, Maui Electric will not proceed with spending any funds on this project without approval to defer the costs"<sup>40</sup> as described in its Application.

Bill impact. MECO states that the average bill impact of its proposal is 19 cents per month for a residential customer using 500 kWh per month, based on the total revenue requirement, without any offsetting revenues.<sup>41</sup> MECO's estimate assumes that the commission grants its request for deferral, an on-going level of O&M expenses after the deferral period, and estimated capital costs of \$1,244,000.<sup>42</sup>

MECO also includes average bill impact estimates using hypothetical offsetting revenues, based on usage data from MEDB, reflecting usage during the most recent twelve months of data carried forward into the future. With this hypothetical revenue

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incrementally commissioned over a period of several months." MECO's Response to PUC-MECO-IR-119.

<sup>40</sup>Application at 12.

<sup>41</sup>MECO's Response to CA-IR-1.a at 1, Attachment 1, filed on January 28, 2019.

<sup>42</sup>MECO's Response to CA-IR-1.a at 1.

offset, the bill impact would be approximately 14 cents per month for the same residential customer.<sup>43</sup>

C.

Proposed Schedule EV-MAUI

MECO's proposed Schedule EV-MAUI, which applies only to DCFC stations that were previously part of the EVohana network, includes time of use rates based on a per kWh charge, as follows:<sup>44</sup>

On-Peak Energy Charge	(5pm-10pm daily):	62 cents/kWh
Mid-Day Energy Charge	(9am-5pm, daily):	49 cents/kWh
Off-Peak Energy Charge	(10pm-9am, daily):	60 cents/kWh

The proposed Schedule EV-MAUI provides that the energy charges may be reset each quarter, upon notice to the commission, to reflect rate changes, changes in other costs to operate the charging facility, and efforts to assess the market price appropriate for the service.<sup>45</sup>

MECO explains that its "proposed EV-MAUI tariff is based on the existing EV-U tariff already approved for Maui[,]"<sup>46</sup>

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<sup>43</sup>MECO Response to CA-IR-1.a at 1, Attachment 1, filed on January 28, 2019. MECO does note that there are several differences between the EVohana program and MECO's proposal that will impact the actual usage of proposed chargers in the future. See MECO Response to CA-IR-1.a at 1-2.

<sup>44</sup>Application, Exhibit A at 1-2.

<sup>45</sup>Application, Exhibit A at 2.

<sup>46</sup>Application at 12.

and asserts that the proposed rate "will incentivize 'smart' charging, by providing lower rates during mid-day hours, when solar energy from independent power producers and the thousands of customers with rooftop solar is abundant."<sup>47</sup>

MECO contends that approval of a separate tariff for the EVohana network (i.e., the proposed Schedule EV-MAUI, rather than the existing Schedule EV-U) is appropriate because it will allow MECO "greater flexibility in evaluating the program as a whole and making modifications to the program, if needed."<sup>48</sup> Moreover, MECO states that "using a separate tariff is needed to allow Maui Electric to avoid the existing pilot termination date of June, 2023, and will not have an impact on the existing 25-facility cap that exists under EV-U."<sup>49</sup>

## II.

### DISCUSSION

The commission recognizes the potential for EVs and the electrification of transportation to support the State's clean energy goals, including through decreasing use of imported fossil fuels, reducing greenhouse gas emissions, and increasing use of

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<sup>47</sup>Application at 9.

<sup>48</sup>Application at 12.

<sup>49</sup>Application at 12.



renewable energy resources.<sup>50</sup> As the commission has previously stated, "[s]martly designed and implemented, a Hawaii-specific electrification of transportation strategy may well be able to complement the State's existing policy goals, driving greater clean energy impacts, and enhanced customer value."<sup>51</sup>

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<sup>50</sup>The commission notes that it "has previously recognized [that] the State of Hawaii has taken a variety of measures to support EV adoption and reduce Hawaii's dependence on traditional fossil fuel modes of transportation." Order No. 35527, "Opening the Docket and Inviting Public Comment," filed on June 13, 2018, in Docket No. 2018-0135, at 4 (referencing Decision and Order No. 34592 in Docket No. 2016-0168, in which the commission referenced, among other things: (1) Act 156, Haw. Sess. Laws 2009 ("Act 156"), § 2 ("[f]oster[ing] the research and development of nonfossil fuel and energy efficient modes of transportation" as a State policy (see HRS § 226-10(16)); (2) Act 156, § 6 (prioritizing the purchase of EVs in new vehicle purchases by the State and Counties (see HRS § 103D-412(b)); (3) HRS § 196-42 (regarding the development of alternate fuels and support for the attainment of a statewide alternate fuels standard); and (4) the Hawaii Clean Energy Initiative 2.0 (calling on signatories to "jointly pursu[e] innovative policies, technologies, and deployment strategies relating to . . . alternative fuels; . . . alternative fuel vehicles; and other forms of clean transportation")); see also HRS § 269-6; Act 38, Haw. Sess. Laws 2015 (amending HRS 226-18(2)).

The commission has also recognized that in December 2017, the mayors of Honolulu, Maui, Hawaii, and Kauai counties jointly committed to transition to 100% renewable fuels in transportation by 2045. Order No. 35527 at 4; see Joint Press Release, available at <http://www.honolulu.gov/cms-csd-menu/site-csd-sitearticles/985-site-csd-news-2017-cat/29848-12-12-17-hawai%CA%BBi%E2%80%99s-mayors-commit-to-shared-goal-of-100-percent-renewable-ground-transportation-by-2045.html>).

<sup>51</sup>Order No. 35527, at 6.

MECO stresses that its proposal to maintain the EVohana network will provide a range of benefits, including immediate benefits to Maui's EV owners and potential owners through the provision of public charging options.<sup>52</sup> Longer term benefits discussed in MECO's Application include providing general support for EV adoption and electrification of transportation, which, according to MECO, will eventually provide a net benefit to all ratepayers.<sup>53</sup> Additional benefits discussed in MECO's Application include reducing imported fossil fuels and increasing use of renewable energy.<sup>54</sup>

The commission acknowledges the potential benefits of MECO's involvement in maintaining the EVohana network, as well as the value of the EVohana network being maintained, in some form,

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<sup>52</sup>See Application at 1-2, 5-6, 8.

<sup>53</sup>See Application at 1-2, 5-6, 7-9. MECO states that "[t]hrough 2045, the Company expects that there will be an approximate \$6,000 net benefit, for every personal light duty EV added to the roadways." Id. at 9. MECO also references the Addendum to Hawaiian Electric Companies' Electrification of Transportation Strategic Roadmap ("EoT Roadmap"), filed on November 29, 2018, in Docket No. 2018-0135. Id. at 7 n.10. The commission notes that aside from net benefits calculated in financial terms, the Companies' EoT Roadmap identifies additional benefits of electrification of transportation, including cleaner air, reducing noise pollution, and decreases in fossil fuel use and corresponding decreases in greenhouse gas emissions that contribute to climate change<sup>53</sup> (EoT Roadmap at 38), all of which will ultimately help achieve the state's climate and clean energy goals.

<sup>54</sup>See Application at 7, 11.



as the State transitions to renewable energy. However, based on the record, the commission does not find MECO's proposal to be fair to its customers. In order to ensure that MECO's rates are just and reasonable, and in the public interest,<sup>55</sup> the commission, as a condition of approval of MECO's request for deferred accounting treatment, will require implementation of a shared savings mechanism, whereby the O&M expenses, capital expenditures, and electric vehicle charging revenues are shared between MECO and its customers. Regarding MECO's proposed Schedule EV-MAUI, the commission denies MECO's request for approval, without prejudice, and instructs MECO to revise its proposed tariff consistent with the commission's guidance.

In the subsections below, the commission discusses (1) the commission's general assessment of MECO's Application and proposal; (2) adjudicates MECO's specific requests for (a) deferral of O&M expenses and (b) approval of Schedule EV-MAUI; and (3) provides additional instruction and guidance.

A.

General Assessment of MECO's Application and Proposal

To summarize the financial elements of MECO's proposal, MECO estimates: capital expenditures of approximately \$1.2 million

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<sup>55</sup>See HRS §§ 269-6, -16.

to remove the existing chargers and to install sixteen "dual port" DCFCs at the eight selected stations; ongoing annual O&M expenses of \$180,000;<sup>56</sup> and deferred O&M expenses of \$140,000. Although MECO did not develop estimated or projected revenues for the eight selected stations,<sup>57</sup> in its bill impact assessment (filed in response to the Consumer Advocate's information request ("IR")), MECO provided hypothetical revenues of \$99,434 per year.<sup>58</sup> MECO explains that these hypothetical offsetting revenues were based on usage data from the most recent 12 months of data carried into the future.<sup>59</sup>

Aside from the bill impact assessment, it appears that MECO relied primarily upon internal qualitative assessments in determining many aspects of its proposal, including decisions to:

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<sup>56</sup>Although MECO does not request specific approval of these capital expenditures and O&M expenses by the instant Application, MECO's proposal to assume ownership of the eight selected EV charging locations from the EVohana network has clear financial implications beyond MECO's specific request to defer actual O&M expenses. As such, the commission, in adjudicating MECO's specific requests, takes into consideration MECO's proposal as a whole, including the estimated capital expenditures and ongoing O&M expenses. See HRS §§ 269-6, -7, -16.

<sup>57</sup>See MECO's Response to PUC-MECO-IR-109.a at 1, filed on February 4, 2019.

<sup>58</sup>MECO's Response to CA-IR-1, filed on January 28, 2019, Attachment 1 at 1.

<sup>59</sup>MECO's Response to CA-IR-1.a at 1, filed on January 28, 2019.



upgrade the existing chargers to "dual port" chargers; install two "dual port" DCFCs at each of the selected stations; and own and operate chargers at eight of the thirteen existing EVohana network stations.<sup>60</sup> Based on the record, MECO did not conduct a market assessment to determine the demand for "dual port" chargers,<sup>61</sup> a cost-benefit analysis to determine the net benefits of its proposal,<sup>62</sup> nor a study indicating whether two "dual port" chargers

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<sup>60</sup>See, e.g., MECO's Response to PUC-MECO-IR-114.c at 1-2, filed on February 4, 2019 ("Maui Electric and Hawaiian Electric EoT staff have jointly analyzed charger utilization of the EVohana network. [ ] This collaboration resulted in Maui Electric's proposal to reduce the number of charging sites from thirteen to eight, select specific highly-utilized sites, and determine the number of chargers at each site to continue to provide the necessary charging services to the Maui EV community."); MECO's Response to CA-IR-1.b at 2-3, filed on January 28, 2019; Transcript at 33-34, 63-66.

<sup>61</sup>See MECO's Response to PUC-MECO-IR-101.f (stating, "[n]o market assessment was conducted to determine whether there is market demand for 'dual port' charging stations for the EV-MAUI service."); see also Transcript at 33-34 (stating that no formal analysis was conducted to determine the number of charging stations and locations proposed, but that MECO considered utilization rates and drew on the experience of MECO and MEDB).

<sup>62</sup>In response to the commission's IR ("Has MECO conducted a cost-benefit analysis with regards to assuming ownership of the 8 proposed EV public charging stations? . . . ."), MECO indicated that it had not conducted a cost-benefit analysis and pointed to its bill impact analysis, explaining that "Maui Electric's application to take over the selected EV charging sites was not made based on an expectation that the network would generate a specific level of incremental revenues to justify the associated costs of the project. Rather, continuing the availability of these chargers was considered based on the request of community stakeholders, and was agreed to by Maui Electric, to continue the adoption of EVs on Maui, which in the long-run, the Company

at the eight selected stations are necessary to provide backbone charging infrastructure on Maui.<sup>63</sup> While the commission acknowledges MECO's statements regarding potential long-term benefits of its proposal,<sup>64</sup> these types of assessments or analyses would have significantly aided the commission in assessing the reasonableness of MECO's proposal.<sup>65</sup>

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believes will provide benefits to all Maui residents." MECO's Response to PUC-MECO-IR-101.c at 2, filed on February 4, 2019.

<sup>63</sup>See, e.g., MECO's Response to PUC-MECO-IR-107.a at 1, filed on February 4, 2019 ("In the future, the Companies plan to revisit the overall charging needs on Maui as part of its EV charging backbone study. The results of which may indicate a need for level 2 charging in various locations and certain use cases. If there's a compelling need, the Companies may propose to develop a level 2 charging program to provide a more comprehensive charging network in the future.").

<sup>64</sup>See, e.g., MECO's Response to PUC-MECO-IR-105.a at 2, filed on February 4, 2019 (stating, "EV adoption provides long-term benefits to all customers, and having adequate EV charging infrastructure plays an important role in encouraging that growth. As a result, the benefit of this project is not limited to the revenues generated directly at the charging stations that are the subject of this application. To the extent that having a backbone of DCFC sites gives consumers the comfort level needed to become EV drivers, the resulting benefits to Maui Electric and the community at-large may come in the form of additional electricity revenues at the EV customers' homes, work places, or at any available charger, including those outside the proposed network of eight sites.").

<sup>65</sup>See Consumer Advocate's Statement of Position, filed on February 8, 2019 ("CA's SOP"), at 11 (providing parameters for what MECO should consider in conducting an analysis of demand for DCFC on Maui).



Despite the lack of a market assessment, cost-benefit analysis, backbone study, or similar type of assessment, MECO, by its Application, sets out a single course of action.<sup>66</sup> Based on the record, the commission is unconvinced that MECO's proposal to replace the existing chargers with sixteen "dual port" chargers is the most cost-effective option, or that such action is necessarily a prudent use of ratepayer funds.<sup>67</sup> The commission is similarly

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<sup>66</sup>See, e.g., Application at 2 (representing that MEDB will have limited options to continue offering EV charging service on Maui if MECO does not assume ownership of the EVohana network); MECO's Response to CA-IR-6.e, filed on January 28, 2019 (stating that "[m]aintaining the existing chargers and program would pose greater risk of higher costs to operate and maintain proprietary equipment. The uncertainty around the availability of parts and support for the chargers would also impact charging station availability to EV drivers. Additionally, the administrative burden of maintaining a subscription-based membership program would increase costs."); but see HIACE's February 19, 2019 Letter to Commission, attached to the commission's February 21, 2019 Letter to Parties ("HIACE's February 19, 2019 Letter"), at 2-3, 4 (describing options to upgrade and retrofit existing chargers, including to enable alternative pricing and billing options), 3 (describing an alternative approach to replace one existing charger at each location with a charger that supports the Combined Charging System ("CCS") standard); MECO's Response to PUC-MECO-IR-117.b at 2-3, filed on February 20, 2019, and MECO's Supplemental Response to PUC-MECO-IR-117, Attachments 1 & 2, filed on March 7, 2019 (describing HIACE's alternative proposal to facilitate continued use of the existing chargers).

<sup>67</sup>See, e.g., HIACE's February 19, 2019 Letter at 2, 3 (providing cost estimates to upgrade and retrofit existing chargers and to replace chargers with CCS chargers); see also CA's SOP at 11 (questioning the cost-effectiveness of MECO's proposal), 23-24 (questioning the prudence of installing two dual port DCFCs at all of the selected locations, regardless of



unconvinced that MECO has adequately pursued alternatives to the course of action proposed by its Application.<sup>68</sup>

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utilization rates), 25 (observing that the existing charging stations are between 3 to 5 years old, rather than 8 years old as stated in MECO's application).

The commission notes that MECO, in stressing that time is of the essence and to provide support for its proposal, apparently misrepresented that the existing chargers are eight years old. See MECO's Response to PUC-MECO-IR-115.e at 3, filed on February 4, 2019 ("As the EVohana chargers are already approximately eight years old, they are experiencing higher rates of failure and requirements for repair."). MECO later stated that it did not obtain installation dates for the chargers and provided "acquisition dates" ranging from December 2013 to March 2016. MECO's Response to PUC-MECO-IR-116 at 1, filed on February 20, 2019. The acquisition dates provided by MECO indicate that none of the chargers were acquired more than six years from the date of MECO's Application. In fact, HIACE has indicated that the chargers were installed between December 2013 and March 2016. HIACE's February 19, 2019 Letter at 1.

<sup>68</sup>See, e.g., HIACE's February 19, 2019 Letter; MECO's Response to PUC-MECO-IR-117.b at 1-2, filed on February 20, 2019 (referencing HIACE's presentation that included a transition plan for continued use of the HIACE chargers, retrofitting existing chargers with point of sale systems, supplying replacement parts); MECO's Supplemental Response to PUC-MECO-IR-117, Attachments 1 & 2, filed on March 7, 2019; CA's SOP at 12 (stating, "the Consumer Advocate believes that greater analysis could have been conducted to support the sites and infrastructure Maui Electric proposes to acquire"), 25 (stating, "the Consumer Advocate believes that Maui Electric should be able to address why replacing the existing chargers is more cost-effective than alternatives such as replacing a subset of the charging infrastructure, including but not limited to replacing the kiosk, software, and/or control center while retaining the chargers. [] Maui Electric should be able to demonstrate how the costs of targeted infrastructure replacement combined with the costs of obtaining the necessary spare parts compares to the costs of replacing the entire charging infrastructure and making any necessary transformer replacements.").

Although the Consumer Advocate did not object to MECO's proposed ownership and operation of the select EVohana network stations,<sup>69</sup> and emphasized the potential for EVs "to provide economic, environmental, and operational benefits in the energy and transportation sectors[,]""<sup>70</sup> the Consumer Advocate did voice significant concerns regarding the financial impact to ratepayers, and in particular, to non-participating ratepayers (i.e., ratepayers who do not utilize the EV charging stations).<sup>71</sup> In addition, it appears that the Consumer Advocate shares many of the commission's concerns, discussed above, regarding the adequacy of the support provided for MECO's proposal, and whether the proposal is cost effective.<sup>72</sup>

It is the commission's expectation that, through implementation of the shared savings mechanism, required in this Decision and Order as a condition of approval of MECO's request, MECO will make prudent, cost-effective choices

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<sup>69</sup>CA's SOP at 7.

<sup>70</sup>CA's SOP at 7.

<sup>71</sup>See CA's SOP at 6, 12, 26.

<sup>72</sup>CA's SOP at 11 (stating, the Consumer Advocate was "unable to assess, given the information provided by Maui Electric and the expedited nature of the proceeding, whether the requested number and combination of stations and Maui Electric's planned investments represent the most cost-effective means to provide sufficient service to existing customers while supporting state and county transportation policy goals.").



with regards to owning and operating select stations from the EVohana network, and to maximize revenues to offset its costs, thereby minimizing risks and financial impacts to all ratepayers.

B.

Adjudication of MECO's Requests

i.

Granting Deferral of O&M Expenses Subject to  
the Implementation of a Shared Savings Mechanism

a.

Deferral of O&M Expenses

For O&M expenses incurred before MECO's next rate case, MECO requests deferred accounting treatment, and estimates these expenses will be \$140,000.

MECO argues that its request to defer costs associated with Schedule EV-MAUI is appropriate because the Project: (1) meets the "beyond control/magnitude standard,"<sup>73</sup> and (2) "will help advance State energy policies[.]"<sup>74</sup> With regards to advancing State energy policies, MECO contends that the "[a]doption of EVs advances the State's clean energy goals by adding electric powered vehicles onto the roadways in lieu of

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<sup>73</sup>Application at 10; MECO's Reply at 2-3.

<sup>74</sup>MECO's Reply Statement of Position, filed on February 15, 2019 ("MECO's Reply"), at 2 (citing Order No. 30229, in Docket No. 2010-0080, filed on February 24, 2012, at 19).



fossil fueled vehicles" and that MECO's "2017 RPS of 34.2% already represents a significantly cleaner source of 'fuel' for EVs compared to internal combustion engine vehicles that continue to be powered by fossil fuels."<sup>75</sup>

Although the Consumer Advocate "recognizes that the proposed expenses are associated with initiatives to advance state and county transportation policies,"<sup>76</sup> the Consumer Advocate objects to MECO's request for deferred accounting treatment, asserting that the request does not meet the "beyond control/magnitude requirement."<sup>77</sup> The Consumer Advocate acknowledges that MECO "had little control over HIACE's decision to no longer operate and maintain the EVohana network or MEDB's decision to discontinue ownership of the stations," but contends that "Maui Electric will have some discretion over the amounts that will be incurred for deferral."<sup>78</sup> As to the magnitude of the request, the Consumer Advocate calculates that "Maui Electric's

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<sup>75</sup>Application at 11.

<sup>76</sup>CA's SOP at 6.

<sup>77</sup>See CA's SOP at 29.

<sup>78</sup>CA's SOP at 29. The Consumer Advocate additionally states that MECO "did not explain why the maintenance could not be done using in-house resources already in base rates or under the existing processes to maintain existing fast chargers." Id. at 30.

estimate of \$190,000<sup>79</sup> in projected costs represents 0.08% of Maui Electric's recently authorized level of operation and maintenance expenses[.]”<sup>80</sup> Thus, “MECO's request to defer \$180,000 on an annualized basis does not constitute an expense of sufficient magnitude as to warrant relief.”<sup>81</sup>

The Consumer Advocate additionally expresses concern regarding the frequency of requests from the Companies for deferral authority, stating:

even with all of the charges occurring and the guidance offered by the Commission with respect to numerous deferral requests, the Hawaiian Electric Companies appear intent to ignore such guidance. Especially in this instance when the acquisition of the chargers would seem to be consistent with the Hawaiian Electric Companies' strategic decision to support Electrification of Transportation, Maui Electric's apparent position to basically “hold hostage” the continued operation of the eight charging sites for \$180,000, or maybe less, seems to highlight an inability to wean itself from cost recovery surcharges and deferral accounting authority. The Consumer Advocate continues to express concerns regarding this observation and encourages the Hawaiian Electric Companies to look for solutions instead of always seeking deferral authority, especially if the amount is as nominal in this instance.<sup>82</sup>

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<sup>79</sup>MECO subsequently corrected its ongoing O&M estimate from \$190,000 to \$180,000.

<sup>80</sup>CA's SOP at 29.

<sup>81</sup>CA's SOP at 29.

<sup>82</sup>CA's SOP at 30-31.

The commission affirms that it "continues to approach deferral accounting requests with substantial caution."<sup>83</sup> As previously stated, deferred accounting treatment is reserved for "exceptional cases."<sup>84</sup> However, the commission has also stated that "expenditures associated with advancing the State's defined energy policies may be eligible for deferred accounting treatment[,]" as the commission has "acknowledge[d] that some action taken to advance defined State policy directives . . . require atypical but prudent expenditures that [the utility] may otherwise not undertake."<sup>85</sup>

MECO explains that community partners requested its assistance in preserving the EV charging infrastructure on Maui, utilized by approximately one third of Maui's EV drivers.<sup>86</sup> MECO asserts that its proposal "advance[s] defined State energy policy directives" so as to "warrant[] deferral accounting

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<sup>83</sup>In re Hawaii Elec. Light Co., Inc., Docket No. 2012-0164, Decision and Order No. 33313, filed on November 4, 2015 ("Order No. 33313"), at 11.

<sup>84</sup>In re Hawaiian Elec. Co., Inc., Docket No. 2010-0080, Order No. 30229, filed on February 24, 2012 ("Order No. 30229"), at 17-18.

<sup>85</sup>Order No. 33313 at 12 (emphasis in original).

<sup>86</sup>See Application at 1, 2, 3, 5; MECO's Reply at 7. The commission notes that a number of stakeholders have provided support for maintaining the EVohana network, in some form, including by pledging ongoing financial support. Application, Exhibit C at 12; Transcript at 61.



treatment of O&M expenses.”<sup>87</sup> While the commission appreciates the Consumer Advocate’s thorough examination of the beyond control/magnitude analysis typically employed for deferred accounting treatment requests, under these unique circumstances, the commission approves MECO’s request for deferred accounting treatment for the actual O&M expenses incurred before MECO’s next interim or final decision and order in MECO’s next rate case, up to \$140,000, and subject to implementation of the shared savings mechanism, detailed below.

MECO is reminded that requests for deferred accounting treatment “should not be viewed as being part of the utility’s business model[,]” and MECO should also “understand that expenses may vary between rate cases and that, in the short run, any increase in expenses must be borne by the utility and any

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<sup>87</sup>MECO’s Reply at 9; see MECO’s Reply at 8-9 (stating that the Project advances the State’s clean energy goals by maintaining and enhancing Maui’s EV infrastructure, thereby preserving and potentially adding to the number of electric powered vehicles onto the roadways in lieu of fossil fueled vehicles. The Project and its positive impact on preserving and adding to the number of EVs will also contribute to the storage capability on Maui’s grid. Indeed, through its support of Maui Electric assuming ownership and operation of the selected charging sites, the Consumer Advocate recognized the importance of EVs with respect to the State’s Renewable Portfolio Standards and also to the County of Maui’s commitment to transition all public and private ground transportation to be fueled by renewable energy by 2045”); Application at 7-9 (referencing reducing fossil fuels, increasing use of renewable energy, as well as net benefits of EVs).

decrease in expenses work to the benefit of the utility.”<sup>88</sup> The commission will continue to examine each request for deferred accounting treatment on a case-by-case basis. As such, the commission’s approval in this instance may not be cited as precedent by any Parties in future proceedings.

b.

Condition of Approval:  
Implementation of a Shared Savings Mechanism

Under the terms in MECO’s Application, ratepayers would fully subsidize all capital costs and O&M expenses,<sup>89</sup> thereby absorbing 100 percent of the risks of the proposal on an ongoing basis, for an indefinite time period. Recognizing that electrification of transportation efforts may well support the State’s existing energy policy goals, as well as enhance customer value, and in light of the commission’s affirmative duty to ensure that MECO’s rates are just and reasonable, the commission has developed a shared savings mechanism that appropriately allocates risk and reward between MECO and MECO’s ratepayers.

As previously stated with regards to the DCFC stations under Schedule EV-U, “the commission has concerns that there may

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<sup>88</sup>Order No. 30229 at 17-18.

<sup>89</sup>See, e.g., MECO’s Response to PUC-MECO-IR-105.a at 1, filed on February 4, 2019.

be insufficient incentives to ensure that the costs incurred [ ] are reasonably controlled.”<sup>90</sup> It is in recognition of this ongoing concern that the commission conditions approval of MECO’s request for deferred accounting treatment upon implementation of the shared savings mechanism detailed below. The commission expects that implementation of the shared savings mechanism will provide incentives for MECO to control costs and maximize revenues, for the benefit of MECO and MECO’s customers.

#### Shared Savings Mechanism

Under the terms of the shared savings mechanism, MECO and its customers will share the costs of reasonably incurred expenses and will similarly share in realized revenues. Initially, MECO may recover the total expenses<sup>91</sup> related to its ownership and operation of the chargers, offset by revenues generated by the stations, entirely from customers.<sup>92</sup> Beginning in year 2 of the mechanism, the customer contribution will gradually begin to decrease, shifting from 100% in year 1 to 80% in year 2,

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<sup>90</sup>Decision and Order No. 34592 at 66, filed on June 2, 2017.

<sup>91</sup>For the purposes of this mechanism, “total expenses” equals MECO’s annual depreciation expense on capital expenditures plus annual O&M expenses plus return on investment. As discussed below, the depreciation of capital expenditures and the O&M expenses are subject to reasonable caps.

<sup>92</sup>For the purposes of this mechanism, total expenses minus revenues results in “net costs,” which may be a loss or a profit depending on whether total expenses exceed revenues.



while MECO's contribution will begin to increase, from 0% in year 1 to 20% in year 2. By year 5, MECO will be responsible for total expenses to the extent that revenues do not fully offset these expenses.

For years 1<sup>93</sup> through 5, customers and MECO shall share in the net costs (i.e., the total expenses minus revenues) related to MECO's ownership and operation of the chargers on a stepped-down basis as follows:

Year 1:	100% customers /	0% MECO
Year 2:	80% customers /	20% MECO
Year 3:	60% customers /	40% MECO
Year 4:	50% customers /	50% MECO
Year 5:	0% customers /	100% MECO

To the extent revenues exceed costs in the first four years, MECO may retain the entirety of any net revenues (i.e., the profit). However, in consideration of the significant potential customer contribution to net costs in years 1 through 4, beginning in year 5, if revenues generated by the stations exceed the total expenses, thereby resulting in a profit, such net revenues shall be shared between customers and MECO as follows:

Year 5:	80% customers /	20% MECO <sup>94</sup>
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<sup>93</sup>The mechanism shall go into effect (i.e., Year 1 begins) when MECO assumes ownership and operation of the first charging station and the station becomes available to customers.

<sup>94</sup>The 80% customer/20% MECO split shall continue beyond year 5 until otherwise ordered by the commission.

For the purposes of determining the total expenses, MECO's actual annual depreciation expense, return on investment, and actual annual O&M expenses may be recovered through the mechanism, subject to reasonable caps which are consistent with MECO's estimated capital expenditures and O&M expenses.

Depreciation expense cap. The cap for depreciation expense is based on MECO's estimated capital expenditures for upgrading sixteen chargers (i.e., \$1,244,400),<sup>95</sup> on a pro-rated basis, or \$77,775 per charger,<sup>96</sup> using MECO's proposed straight-line method of depreciation.<sup>97</sup> If actual capital expenditures per charger are lower than the cap, then actual expenses shall be utilized in determining the annual depreciation expense for the purposes of the shared savings mechanism. If actual capital

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<sup>95</sup>The commission acknowledges that, by its Application, MECO proposes to install sixteen chargers at eight of the EVohana network locations; the commission clarifies that the mechanism provides MECO with the flexibility to install up to sixteen chargers, but does not require that MECO install the maximum of sixteen chargers proposed in the Application.

<sup>96</sup>See MECO's Response to PUC-MECO-IR-101.e, filed on February 4, 2019.

<sup>97</sup>MECO uses a useful life of 15 years for the chargers (see MECO Response to CA-IR-1, Attachment 1 at 2); however, Ulupono models a 10 year useful life. See Application, Exhibit C at 13.

expenditures per charger are higher than the cap, then the capped amount shall be utilized.<sup>98</sup>

O&M expenses cap. For the purposes of the shared savings mechanism, annual O&M expenses shall be based on actual annual O&M expenses, capped at MECO's estimate of \$180,000.<sup>99</sup>

ii.

Denying, Without Prejudice, MECO's Request  
for Approval of Schedule EV-MAUI

MECO states that its "proposed EV-MAUI tariff is based on the existing EV-U tariff already approved for Maui[,] "<sup>100</sup> and that the rate "will incentivize 'smart' charging, by providing lower rates during mid-day hours, when solar energy from independent power producers and the thousands of customers with rooftop solar is abundant."<sup>101</sup> MECO indicates that it plans to revisit the current rate structures and to revisit EV-MAUI's rate structure "to determine whether new or different rate schedules are appropriate to further align with policy goals, grid impacts,

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<sup>98</sup>To the extent that capital expenditures exceed the per charger pro-rated cap of \$77,775, MECO may not recover such excess costs from customers.

<sup>99</sup>To the extent that annual O&M expenses exceed the cap of \$180,000, MECO may not recover such excess costs from customers.

<sup>100</sup>Application at 12.

<sup>101</sup>Application at 9.



market potential and incentive structures, once the critical backbone is identified."<sup>102</sup>

MECO contends that approval of a separate tariff for the EVohana network (i.e., the proposed EV-MAUI tariff, rather than the existing EV-U tariff) is appropriate because approval of a separate tariff will allow MECO "greater flexibility in evaluating the program as a whole and making modifications to the program, if needed."<sup>103</sup> Moreover, MECO states that "using a separate tariff is needed to allow Maui Electric to avoid the existing pilot termination date of June, 2023, and will not have an impact on the existing 25-facility cap that exists under EV-U."<sup>104</sup>

In its SOP, the Consumer Advocate recommends that, rather than approve MECO's proposed Schedule EV-MAUI, the proposed stations should:

be subject to Schedule EV-U because Maui Electric's ownership and operation of the stations should be consistent with the goals and requirements of the Commercial Public Electric Vehicle Charging Service Pilot. Having all utility-owned DCFC facilities subject to the same tariff would also reduce customer confusion and streamline reporting. To this end, the Consumer Advocate supports expanding the maximum number of fast charging accounts available to the Hawaiian Electric

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<sup>102</sup>Application at 12-13.

<sup>103</sup>Application at 12.

<sup>104</sup>Application at 12.

Companies under Schedule EV-U to accommodate the proposed stations.<sup>105</sup>

Regarding reporting requirements, the Consumer Advocate asserts that MECO should be required to conduct "the same types of assessments and evaluations that are conducted as part of the pilot[,] "<sup>106</sup> and that "reporting data for utility owned DCFC facilities would be more streamlined if the data is reported in one report as opposed to two reports (i.e., pilot program Annual Reports and EV-MAUI Annual Reports). "<sup>107</sup>

In its Reply, MECO states that, although it maintains its request for the proposed Schedule EV-MAUI, it does not oppose the Consumer Advocate's recommendation to utilize Schedule EV-U for the eight select charging locations, "provided that the current EV-U facility cap is expanded to accommodate the proposed eight additional sites, bringing the facility total to 33." <sup>108</sup>

Upon review of MECO's proposed Schedule EV-MAUI, it is not clear that the tariff adequately incentivizes daytime charging

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<sup>105</sup>CA's SOP at 6 (emphasis added). The Consumer Advocate additionally states: MECO's proposal to transfer ownership of the charging locations "is consistent with the intent of the pilot program and Schedule EV-U" and that utilizing the same tariff for all of MECO's DCFC stations "would be less confusing for consumers" than utilizing two different tariffs." CA's SOP at 16.

<sup>106</sup>CA's SOP at 16.

<sup>107</sup>CA's SOP at 17.

<sup>108</sup>MECO's Reply at 11.

(i.e., when there is extra capacity on the grid); sends the right price signals to EV drivers and potential EV drivers; or is properly tailored for Maui's specific grid needs. As such, the commission instructs MECO to submit a tariff proposal that better aligns with MECO's costs during the daytime period and thereby better incents customers to charge their EVs during the mid-day hours, to reduce the overall cost of charging during these hours, and to facilitate increased utilization of chargers.<sup>109</sup>

Upon reviewing MECO's revised schedule, the commission will consider whether it is appropriate to approve a Schedule EV-MAUI tariff, or to adjust the Schedule EV-U tariff under the Commercial Public Electric Vehicle Charging Service Pilot to accommodate MECO's ownership and operation of the additional charging stations on Maui.<sup>110</sup>

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<sup>109</sup>In instructing MECO to file a revised tariff, the commission is cognizant of the July 2020 anticipated operation date under MECO's current proposal. The commission will expeditiously review a revised schedule upon receipt, and anticipates providing its assessment of such tariff well before MECO assumes ownership and begins operation of any of the stations.

<sup>110</sup>The commission notes its intention to instruct the HECO Companies to revisit Schedules EV-U and EV-F in Docket No. 2018-0135.



C.

Instruction and Guidance

i.

Backbone Charging Infrastructure Study

MECO states that it plans to "revisit the overall charging needs on Maui as part of its EV charging backbone study"<sup>111</sup> and estimates the study to be completed during the second or third quarter of 2019.<sup>112</sup> MECO also states that "the Companies determined that the EVohana network, if approved, would be assumed into the baseline level of infrastructure for purposes of the backbone study."<sup>113</sup> When asked about the possibility of removing this assumption, MECO responded by stating that it anticipates that

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<sup>111</sup>MECO's Response to PUC-MECO-IR-107.a, filed on February 4, 2019; see also EoT Roadmap, filed in Docket No. 2018-0135, at 86, stating: "Hawaiian Electric proposes to site, install, own, and operate a reliable, uncongested 'critical backbone' of public charging infrastructure on the islands in its service territory. This critical backbone will be a network that consists of the DCFC and Level 2 chargers needed to eliminate existing range anxiety, where these are not already being provided by third-party charging providers.").

<sup>112</sup>MECO's Response to PUC-MECO-IR-115.b, filed on February 4, 2019.

<sup>113</sup>MECO's Response to PUC-MECO-IR-115.c, filed on February 4, 2019.

removing the assumption would "show an increased need for charging infrastructure."<sup>114</sup>

The commission agrees with the Consumer Advocate that the assumption that the eight selected EVohana stations are maintained should be removed from the backbone study.<sup>115</sup> By removing this assumption, a backbone study would reflect a more accurate assessment of charging needs on Maui and better assist MECO in determining which charging stations should reasonably be maintained to provide the referenced critical backbone network.<sup>116</sup> As such, the commission instructs MECO to remove from the backbone study the assumption that the eight selected EVohana network stations are maintained.

ii.

Timeline for MECO's Decision Regarding Assumption of Ownership and Operation of Select EVohana Network Stations

The commission is aware that time is of the essence regarding MECO's Application and next steps for the EVohana network

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<sup>114</sup>MECO's Response to PUC-MECO-IR-115.d, filed on February 4, 2019.

<sup>115</sup>See CA's SOP at 13.

<sup>116</sup>The commission expects that MECO would use the backbone study to determine which of the EVohana network stations should be maintained, and how many chargers are needed at individual stations.

stations. By March 29, 2019, MECO shall file with the commission a statement indicating whether MECO intends to proceed with assuming ownership and operation of select EVohana network stations, in light of the commission's condition of approval (i.e., implementation of a shared savings mechanism).<sup>117</sup> The commission views the electrification of transportation as an essential component in achieving the State's energy goals. In general, the commission agrees with MECO that assuming ownership and operating select EVohana network stations will support various State energy policy goals, and will "expand support for electrified transportation, send a strong signal to the community that there is value in providing EV charging resources, and set the stage for developing market value over the long term."<sup>118</sup> However, as discussed above, the commission emphasizes the importance of appropriately allocating risk and reward between MECO and MECO's ratepayers.

As such, the commission approves MECO's request to transfer ownership of the charging infrastructure, subject to the condition described herein. However, if MECO determines that it

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<sup>117</sup>The commission anticipates that implementation of the shared savings mechanism will require corresponding adjustments to existing cost recovery mechanisms to reconcile total expenses, revenues, and net costs.

<sup>118</sup>Application at 8.



does not want to proceed with owning and operating the EVohana network, in light of the commission's requirement regarding implementation of a shared savings mechanism, the commission intends to work with interested stakeholders (for instance, MEDB, Ulupono, the County of Maui, HIACE, Hawaii Energy, and other entities) in order to ensure a viable charging infrastructure network continues to be available on Maui. As such, if MECO declines to proceed with assuming ownership and operation of select EVohana network stations, the commission intends to offer similar terms to interested third-parties, for their ownership and continued operation of the EVohana charging network, in some form.

### III.

#### ORDERS

##### THE COMMISSION ORDERS:

1. MECO's request for approval of Schedule EV-MAUI is denied, without prejudice. The commission instructs MECO to file a revised tariff consistent with the commission's guidance herein.
2. MECO's request to defer certain operations and maintenance expenses is granted, subject to implementation of the shared savings mechanism detailed herein.

3. By March 29, 2019, MECO shall file with the commission a statement indicating whether MECO intends to proceed with assuming ownership and operation of select EVohana network stations in light of the commission's condition of approval (i.e., implementation of a shared savings mechanism).

DONE at Honolulu, Hawaii MAR 22 2019.

PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

By James P. Griffin  
James P. Griffin, Chair

By Jennifer M. Potter  
Jennifer M. Potter, Commissioner

APPROVED AS TO FORM:

Jessica R. Freedman  
Jessica R. Freedman  
Commission Counsel

2018-0422.ljk

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by  
hand-delivery to the following parties:

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